

Precision Wirewound Potentiometer DP18 St

Single Tap, Plug Connection, Sliding Bearing



The potentiometer DP18 has a reinforced glass-fibre plastic housing of high thermal resistance and hardness. It can be additionally encapsulated and then achieves the protection class IP 67.

The potentiometer can be supplied with a shaft led through on the rear side and is also available as multiple version (stackable).

The resolution of 0,15% at 5 K-Ohm / 330° is lower than for our types DP113 or DP120 corresponding to the smaller housing diameter.

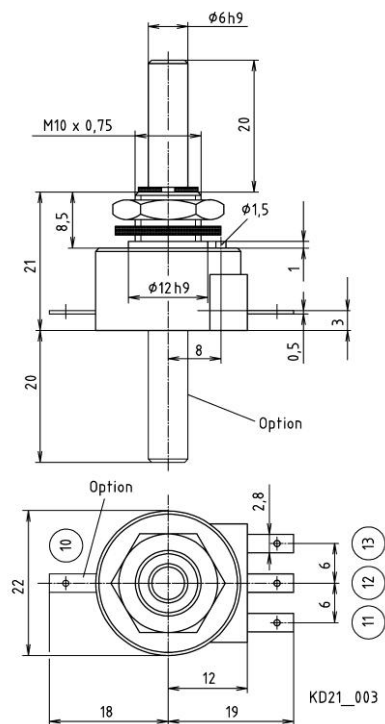


Mechanical Data

- 1.1 Housing.....: Reinforced glass-fibre plastic
- 1.2 Shaft.....: Stainless steel $\phi 6^{h9}$
- 1.3 Bearing.....: Maintenance-free sliding bearing
- 1.4 Resistor element.....: Precision wire winding
- 1.5 Slider tap / wiper tap.....: Noble metal, single
- 1.6 Housing protection class.....: IP 60
- 1.7 Type of connection.....: Blade terminal DIN 46342
- 1.8 Mounted by.....: Central fixing M10 x 0,75
- 1.9 Mechanical rotation angle.....: 330° +5°
- 1.10 Electrical rotation angle.....: 330° -1° +2°
- 1.11 Rotation speed.....: Max. 60 rpm
- 1.12 Torque.....: till 1,0 Ncm
- 1.13 Rotation life-time.....: 1 x 10⁶ slider path (360°)
- 1.14 End-stop strength.....: 50 Ncm
- 1.15 Tension strength at blade terminals...: 30 N

Electrical Data

- 2.1 Resistance values, standard.....: 1, 2, 5, 10 K-Ohm
- 2.2 Resistance value, max.possible.....: 20 K-Ohm
- 2.3 Resistance tolerance.....: $\pm 5\%$
- 2.4 Resolution at 5 K-Ohm / 330°.....: 0,15%
- 2.5 Max. starting / end resistance.....: 1% (of overall resistance => 1K)
- 2.6 Linearity tolerance.....: $\pm 0,5\%$
- 2.7 Insulation resistance.....: 20 M-Ohm
- 2.8 Test voltage.....: 500 V, 50 Hz
- 2.9 Operating voltage.....: Max. 50 V
- 2.10 Power rating.....: Max. 1,5 Watt
- 2.11 Slider load current.....: 1 mA (max. load life)
- 2.12 Temperature range.....: -50°C till +100°C
- 2.13 Temperature coefficient.....: 20 ppm/°C



Options

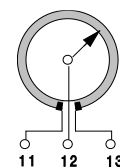
Short-circuit tracks
Centre taps
Resistance tolerance: $\pm 3\%$
Resistance tolerance: $\pm 1\%$
Shaft: special length, led through on the rear side
slider throughrotation
Electrical rotation angle: max. 355°
Mechanical rotation angle: max. 360°
Protection class: up to IP67, shaft-side
Protection class: up to IP67* complete

Accessories

Protection housing
Bellows coupling
Pin coupling
Micro switch
Scale 0 till 100%
Rotary knob
Terminal wires

Other types

Multiple version
Print connection
Needle bearing

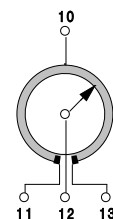


Terminal Plan	
Point	Function
11	winding 1
12	slider 1
13	winding 1

* Potentiometer housing encapsulated, protection class IP65/67, connections are free.
Completely encapsulated potentiometers are supplied with cable and protective housing.

Symmetry of the dead zone:
Resistance difference of the halves max. 1% of total resistance

Option
Centre tap dead zone + 1,5° / - 1,5°
Centre tap dead zone + 3° / - 3°
Centre tap dead zone + 6° / - 6°
Shaft on both sides



Terminal Plan	
Point	Function
10	centre tap 1
11	winding 1
12	slider 1
13	winding 1